

19



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12

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(71) Applicant: **International Business Machines Corporation**
Old Orchard Road
Armonk, N.Y. 10504(US)

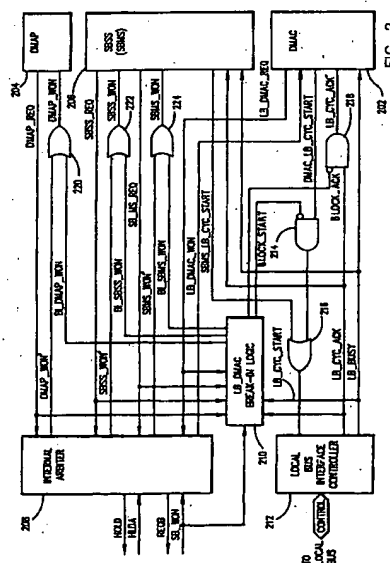
72 Inventor: Garcia, Serafin Jose Eleazer, Jr.
304 Buttonwood Lane

Boynton Beach, Florida 33436(US)
Inventor: Chisholm, Douglas Roderick
3512 Blvd.Chatelaine
Delray Beach, Florida 33445(US)
Inventor: Kalman, Dean Alan
1402 Copley Court
Lantana, Florida 33462(US)
Inventor: Padgett, Russell Stephen
51 Sparrow Drive
Royal Palm Beach, Florida 33411(US)
Inventor: Yoder, Robert Dean
5189 Jog Lane
Delray Beach, Florida 33484(US)

74 Representative: **Burt, Roger James, Dr.**
IBM United Kingdom Limited Intellectual
Property Department Hursley Park
Winchester Hampshire SO21 2JN(GB)

⑤④ **Computer interface circuit.**

57) A plurality of specialized controllers, e.g. 202, 204 & 206, each one adapted to control a particular type of data transfer operation, control the flow of data between a system bus 104 and a local bus 106 on a computer adapter card 102. When the Direct Memory Access DMA controller 202 is controlling a DMA operation on the local bus, certain other controllers 204 & 206 can break-in to the current DMA operation, temporarily halting the DMA operation until the other controller has completed its data transfer operation. To break-in to a DMA operation, handshaking signals between the DMA controller and the local bus interface circuit 212 are temporarily blocked by blocking signals from a break-in logic circuit 210. The break-in circuit includes a four-state state machine to block the handshaking signals at the appropriate times, and to signal the interrupting controller to begin its data transfer operation. When breaking-in to a DMA operation in this manner, the operation of the DMA controller is not altered; instead, to the DMA controller, it appears that the local bus interface circuit is merely slow to respond with its acknowledge handshake.



EP 90 31 2210

DOCUMENTS CONSIDERED TO BE RELEVANT			Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CL.5)
Category	Citation of document with indication, where appropriate, of relevant passages			
X	EP-A-0 166 248 (FUJITSU LIMITED) * page 1, line 23 - page 2, line 5 * * page 3, line 6 - page 7, line 15; figures 1, 2A, 2B, 3A, 3B *	1		G06F13/30 G06F13/32
A	EP-A-0 340 972 (OKI ELECTRIC INDUSTRY COMPANY, LIMITED) * page 4, column 5, line 31 - page 5, column 7, line 41; figures 1, 2 *	1-6		
				TECHNICAL FIELDS SEARCHED (Int. CL.5)
				G06F
The present search report has been drawn up for all claims				
Place of search THE HAGUE		Date of completion of the search 01 SEPTEMBER 1992		Examiner JONES H.D.
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : members of the same patent family, corresponding document</p>				